Fathers' influence on the development of children in disadvantaged settings

Alan Feranil
University of San Carlos-Office of Population Studies Foundation Inc

Introduction

Studies on the importance of fathers on the development of children have been limited. Most of the studies on paternal involvement have focused on their presence or absence (Black, Dubowitz and Starr, 1999 in Dubowitz et al., 2001: 300), financial support (Ohare, 1995 in Dubowitz et al., 2001: 301) and emotional support to the mother (Parke and Power and Gottman, 1979 in Dubowitz et al., 2001: 301). Studies have also shown that nature and quality of father-child relationship influence their children's wellbeing (Dubowitz et al., 2000 in Dubowitz et al., 2001: 301). However, much of the studies on fathers' involvement in childbearing and childrearing have focused primarily on developed countries (Kelley et al, 1998; Pleck 1997 in Dubowitz et al., 2001: 301). There are limited if not scarce studies on the experience of developing countries much more so in disadvantaged areas.

This study took into consideration the underlying conceptual framework of early childcare and development concepts where development of children is influenced with their interaction with the environment. In line with Brofenbrenner's ecological model (1979), I examined the environment where the child's learning and development occurs. These include the child's own attributes, her/his family, and her/his community.

Contribution of this study
By examining the influence of paternal characteristics and their involvement in children activities on the development of their children, this study aimed to provide additional evidence on the growing literature on the paternal influence on the well being of children particularly those in disadvantaged settings.

Major Objective

The major objective of this study was to determine the influence of paternal characteristics and father child interaction on the cognitive development of children in disadvantaged areas in the Philippines.

Data and Methods

This study focused on a sample of 1,067 pre-school children who were not yet enrolled in formal school. The sample included five to six year old children living in the *barangays* (villages) where the Early Childhood Development Project (i.e Western and Central Visayas) was introduced. These *barangays* were those identified to be at risk and in need[1] by the Philippine government's Department of Social Welfare and Development (Council

[1] Those in need include populations with children aged d 0-5 who are at risk of dying or populations with children 6-12 years old who have dropped out of elementary school or who are underweight (less than 75% of the standard). Those at risk include populations with children aged 0-5 who are living in households with limited information, in households with low income per capita income or in a community with limited social services (Council for the Welfare of Children, 1999).

for the Welfare of Children, 1999). Thus the sample children from these *barangays* provided a different insight into the cognitive development of children living in a disadvantaged setting.

Variables

Outcome Variable: Cognitive development scores

The major outcome variable of this study was the child's cognitive development score. The score was drawn from an assessment tool used by the Department of Education for the main purpose of knowing whether preschool children are prepared to pursue formal education. The 2005 round of the ECD survey was the first time the school readiness assessment was administered to children who were at least five years old and who were not yet enrolled in formal schooling (Grade 1). Children were administered a set of assessment forms that measured the different skills which included cognitive development. The scores refer to the achievement of solidly based abilities anchored on age appropriate development milestones that indicate preparedness to for Grade 1.

Exposure Variables: Paternal influence

In this study, father's influence was measured in terms of his characteristics (age and education) and interaction with the children (like reading, telling stories, exchanging stories, playing, taking the child to daycare or preschool and taking the child outdoors for walks).

Covariates: Individual, household and community attributes

I also considered other individual, households that may influence a child's development. These included individual and household factors. Individual level attributes included the child's age, sex, nutritional status (whether she/he was stunted or not) and whether the child was exposed to television programs; and maternal attributes like mother's age, education, work status and their interaction with children.

Household level attributes included the following: number of persons in the household, land ownership and house ownership.

Tools for Analysis

Several statistical techniques were used in the analysis. Measures of central tendency and cross tabulations were used to explore the characteristics of the children, the major attributes of their fathers and interaction with their children Regression models were carried out to determine the effects of the exposure on the outcome variable and of the other covariates and determine which of these paternal variables, and household variables would be significantly associated with cognitive development considering them altogether. I included maternal characteristics and interaction with the children to

determine if fathers' influence continue to prevail considering the mothers' characteristics and involvement. STATA Statistical Software was used to carry out the statistical analyses.

Results

Findings shown in Table 1 revealed that children were on average more than five years old. There were about the same proportion of girls and boys. More than half of these children were normal (not stunted) and seven of every ten have attended preschool or daycare services and more than a majority were exposed to television programs.

Data on fathers revealed that they were in their late 30s and only a few had some college education. Fathers did not interact often with their children. As shown in the table, only four of every ten fathers played with their children or took them outdoors. Sadly only a few fathers took their children to school or read them stories. However, many of the fathers exchanged stories with their children. Mothers of these children were younger than the fathers, being in their mid-30s and about the same proportion of mothers had college education as the fathers. More mothers interacted with the children. More mothers played with the children, took them to school, read and exchanged stories and took them outdoors compared to the fathers.

Since the sample was drawn from disadvantaged settings, I expected the household environment to be of low status. On average, a household had more than four children. Although many of the houses were owned by the family, the land were not owned indicating the low status of these households.

Shown in Table 2 is the disparity between girls and boys with respect to cognitive development. Results indicate that girls performed better than girls. Majority of the children showed average or beyond average cognitive development.

Results of the regressions revealed that among the paternal characteristics, father's age, education and their taking the child to school were associated with the cognitive development of children (Table 3, Model 1). However, taking the child's attributes and household environment into account diminished the influence of these paternal factors, leaving paternal education and taking the child to school as important factors associated with cognitive development of these children (Model 2). The child's attributes and the household factors figured prominently in influencing the cognitive development to these children indicating the importance of one's age, sex, nutritional status (not stunted), attendance to day care and exposure to television and the household environment on cognitive development.

The role of mothers in developing societies which put a premium of mothers' role in childbearing and childrearing cannot be disregarded. Considering maternal characteristics and their involvement with children revealed their importance in the cognitive development of children and reduced the effect of paternal attributes. It was only the fathers' education that remained important when other factors were accounted for (Model 3).

Results of the regressions revealed that although fathers may have played an important role in the cognitive development of their children, their influence was overshadowed by the influence of other factors like the child attributes, household environment and maternal influence. In developing societies where fathers are perceived to be the breadwinners and childrearing is relegated to the mothers, the influence of fathers on child development was still not apparent.

Table 1. Characteristics of children, their parents, and household.

Characteristics	N=1,067	
	Mean	SD
Child attributes		
Age	5.80	0.50
Sex (Boys)	0.51	0.50
Nutritional status (not stunted)	0.58	0.49
Attends day care or preschool	0.72	0.44
Exposed to television programs	0.84	0.37
Paternal characteristics		
Age	38.42	7.47
College educated	0.18	0.38
Paternal interaction with children		
Plays with child	0.44	0.50
Takes child to school	0.10	0.30
Read stories to child	0.14	0.35
Exchange stories with children	0.70	0.46
Takes child outing	0.47	0.50
Maternal characteristics		
Age	35.22	6.75
College educated	0.18	0.39
Maternal interaction with children		
Plays with child	0.66	0.48
Takes child to school	0.27	0.44
Read stories to child	0.26	0.44
Exchange stories with children	0.88	0.32
Takes child outing	0.45	0.50
Household environment		
Land ownership	0.36	0.48
House ownership	0.88	0.32
Number of living children	4.67	2.49

Table 2. Status of the cognitive development of preschool children

Characteristics	N=1,067	
	Mean	SD
Scores		
Cognitive score of girls	10.02	3.19
Cognitive score of boys	8.97	3.17
Cognitive score of both girls and boys	9.49	3.20
Development status of cognitive development	Per cent	N
Delayed development	18.56	198
Normal development	58.01	619
Advanced development	23.43	250

Table 3. Regression coefficients of characteristics associated with the cognitive development of preschool children (Models 1 and 2)

Characteristics	**Model 1**				**Model 2**			
	Beta	**95% CI**			**Beta**	**95%CI**		
Father's characteristics								
Age	-0.04	-0.07,	0.01	**	0.01	-0.01	0.04	
College education	2.20	1.69,	2.71	**	1.31	0.84	1.79	**
Plays with children	-0.33	-0.76	0.11		-0.35	-0.74	0.04	
Takes child to school	1.14	0.51	1.77	**	0.66	0.10	1.23	*
Reads to child	-0.21	-0.79	0.36		-0.07	0.57	0.44	
Exchanges stories with children	-0.07	-0.54	0.41		0.17	-0.25	0.59	
Takes children outing	-0.20	-0.60	0.19		-0.13	-0.48	0.22	
Co-variates								
Child characteristics								
Age					0.69	0.35	1.04	**
Sex					-0.81	-1.15	-0.47	**
Nutritional status (not stunted)					0.68	0.33	1.04	**
Attends daycare					1.49	1.07	1.91	**
Exposure to television					1.10	0.63	1.58	**
Household factors								
Number of living children					-0.25	-0.33	-0.16	**
Land ownership					0.77	0.41	1.14	**
House ownership					-0.59	-1.13	-0.04	*
Mother's characteristics								
Age								
College education								
Plays with children								
Takes child to school								
Reads to child								
Exchanges stories with children								
Takes children outing								

Model 1 is an unadjusted model considering father's characteristics only
Model 2 is adjusted for other covariates like child attributes and household characteristics
*significant at 95% level of confidence, ** significant at 99% level of confidence

Table 2. Regression coefficients of characteristics associated with the cognitive development of preschool children (Model 3)

Characteristics	Model 3			
	Beta	95% CI		
Father's characteristics				
Age	0.03	-0.01	0.06	
College education	1.06	0.52	1.61	**
Plays with children	-0.38	-0.80	0.03	
Takes child to school	0.53	-0.05	1.10	
Reads to child	-0.14	-0.76	0.48	
Exchanges stories with children	0.07	-0.39	0.53	
Takes children outing	-0.12	-0.53	0.28	
Co-variates				
Child characteristics				
Age	0.71	0.36	1.06	**
Sex	-0.80	-1.14	-0.45	**
Nutritional status (not stunted)	0.69	0.33	1.05	**
Attends daycare	1.39	0.96	1.81	**
Exposure to television	1.08	0.61	1.56	**
Household factors				
Number of living children	-0.21	-0.30	-0.11	**
Land ownership	0.76	0.39	1.13	**
House ownership	-0.51	-1.05	0.04	
Mother's characteristics				
Age	-0.03	-0.07	0.01	
College education	0.35	-0.19	0.89	
Plays with children	0.06	-.0.36	0.49	*
Takes child to school	0.52	0.11	0.93	
Reads to child	0.09	-0.41	0.58	
Exchanges stories with children	0.41	-0.20	1.01	
Takes children outing	-0.12	-0.53	0.29	

Model 3 is adjusted for the other covariates including child, household and maternal factors.
*significant at 95% level of confidence, ** significant at 99% level of confidence*

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